BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- IMPROVEMENTS AND ASPHALTING TO ROADS FROM DODDABALLAPURA MAIN ROAD TO JP COLONY IN CHOWDESHWARI WARD NO. 02 OF YELAHANKA SUB DIVISION

								Estimation Cost.Rs		3200000.00
Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount	
1	KSRRB 300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 &136 ,I No-19.1&17.4& 17.1) 5km lead= 57+2.0x1.28x5 =69.80									
	New Drain									
	Puttenahalli KHB Colony									
	Cross Road	Cum	2	63	0.95	0.90	107.73			
	New Culvert									
	Puttenahalli KHB Colony									
	2nd Main Road	Cum	1	7.00	1.70	0.85	10.12			
	Basic rate	130.00								
	Area weightage 6%	7.80								
	5Km lead & Lift= 57+(2*1.28*5)	69.80								
	Sub Total	**207.60**								
	Total						**117.85**	**207.60**	**24465.00**	
2	KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.13, I.No. 4.3)									
	For Drain									
	Puttenahalli KHB Colony									
	Cross Road	Cum	2	63	0.95	0.15	17.96			
	For Culvert									
	Puttenahalli KHB Colony									
	2nd Main Road	Cum	1	7.00	1.70	0.15	1.79			
	Basic rate	5475.28								
	Area weightage 6%	328.52								
	Sub Total	**5803.80**								
	Total						**19.74**	**5803.80**	**114567.00**	
3	Providing laying plain/ reinforced cement concrete for side Drains Using M20 nominal mix Concrete with OPC at 300kgs.With 20mm and Down size granite metal coarse aggregate at 0.69cum and fine aggregate at 0.43cum Machne mixed, well compacted for wall and Bottom including centering shuttering,cost of materials,HOM of Machinery,Curing Etc.,Complete Excluding cost of Steel as per morth MORTH specification No. 1500, 1700, 2200. Including Cost of material, Labour, HOM complete as per Specification-WALL & Bottom thickness 15Cm(Item No 37.59.2 page no 271)									
	Drain									
	Bottom Raft									
	Puttenahalli KHB Colony									
	Cross Road	Cum	2	62.50	0.75	0.15	14.06			
	Side Wall									
	Puttenahalli KHB Colony									
	Cross Road	Cum	4	62.50	0.15	0.60	22.50			
						Sub Total	**36.56**			
	Culvert									
	Bottom Raft									
	Puttenahalli KHB Colony									
	2nd Main Road	Cum	1	7.00	1.50	0.20	2.10			

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	Side Wall								
	Puttenahalli KHB Colony								
	2nd Main Road	Cum	2	7.00	0.20	0.50	1.40		
					Sub Total		**3.50**		
	Basic rate	7292.14							
	Area weightage 6%	437.53							
	Sub Total	**7729.67**							
	Total						**40.06**	**7729.67**	**309670.00**
4	KSRB M2200-6 Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. MORTH Specification NO.1600&2200Specification No. Pg No.229 Item No.28.8.2								
	For Drain	Cum	From Item No. 3				36.56		
		kg	Steel assumed 60Kg/Cum of Concrete				2193.75		
		tonne					**2.19**		
	For Culvert	Cum	From Item No. 3				3.50		
		kg	Steel assumed 90 Kg/Cum of Concrete				315.00		
		tonne					**0.32**		
	Basic rate	85468							
	Area weightage 6%	5128.08							
	Sub Total	**90596.08**							
	Total						**2.51**	**90596.08**	**227282.92**
5	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	New Drain Cover slab								
	Puttenahalli KHB Colony								
	Cross Road	Sqm	2	.63	0.75		93.75		
	Data rate	**1922.00**							
	Total						**93.75**	**1922.00**	**180188.00**
6	Providing and Fixing pre cast **covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge								
	Culvet cover Slab								
	Puttenahalli KHB Colony								
	2nd Main Road	Sqm	1	7.00	1.50		10.50		
	Data rate	**5418.00**							
	Total						**10.50**	**5418.00**	**56889.00**
7	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 5km lead= (I No-19.14,P No-143)								
	Road Cut Portion								
	Puttenahalli KHB Colony								
	1st Main Road	Cum	1	14.00	1.00	0.20	2.80		
	1st Cross Road (Left)	Cum	1	12.00	1.50	0.20	3.60		
	2nd Main Road	Cum	1	10.00	2.00	0.20	4.00		
	2nd Cross Road (Left)	Cum	1	9.00	0.50	0.20	0.90		
	2nd Cross Road (Right)	Cum	1	17.00	1.00	0.20	3.40		

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	3rd Cross Road (Left)	Cum	1	11.00	1.20	0.20	2.64		
	3rd Cross Road (Right)	Cum	1	7.00	0.60	0.20	0.84		
	3rd Cross, 2nd Cross connecting Road (Right)	Cum	1	12.00	2.00	0.20	4.80		
	Basic rate	41.00							
	Area weightage 6%	2.46							
	5Km lead= (2*1.28*5)	12.80							
	Sub Total	**56.26**							
	Total						**22.98**	**56.26**	**1293.00**
8	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
	Road Cut Portion								
	Puttenahalli KHB Colony								
	1st Main Road	Cum	1	14.00	1.00	0.20	2.80		
	1st Cross Road (Left)	Cum	1	12.00	1.50	0.20	3.60		
	2nd Main Road	Cum	1	10.00	2.00	0.20	4.00		
	2nd Cross Road (Left)	Cum	1	9.00	0.50	0.20	0.90		
	2nd Cross Road (Right)	Cum	1	17.00	1.00	0.20	3.40		
	3rd Cross Road (Left)	Cum	1	11.00	1.20	0.20	2.64		
	3rd Cross Road (Right)	Cum	1	7.00	0.60	0.20	0.84		
	3rd Cross, 2nd Cross connecting Road (Right)	Cum	1	12.00	2.00	0.20	4.80		
	Basic rate	1888.00							
	Area weightage 6%	113.28							
	Sub Total	**2001.28**							
	Total						**22.98**	**2001.28**	**45990.00**
9	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6)								
	Road Cut Portion								
	Puttenahalli KHB Colony								
	1st Main Road	Sqm	1	14.00	1.00		14.00		
	1st Cross Road (Left)	Sqm	1	12.00	1.50		18.00		
	2nd Main Road	Sqm	1	10.00	2.00		20.00		
	2nd Cross Road (Left)	Sqm	1	9.00	0.50		4.50		
	2nd Cross Road (Right)	Sqm	1	17.00	1.00		17.00		
	3rd Cross Road (Left)	Sqm	1	11.00	1.20		13.20		
	3rd Cross Road (Right)	Sqm	1	7.00	0.60		4.20		
	3rd Cross, 2nd Cross connecting Road (Right)	Sqm	1	12.00	2.00		24.00		
	Basic rate	32.00							
	Area weightage 6%	1.92							
	Sub Total	**33.92**							
	Total						**114.90**	**33.92**	**3898.00**
10	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.158,I.No.21.2).								
	BC overlay								
	Puttenahalli KHB Colony								
	1st Main Road	Sqm	1	224.00	7.00		1568.00		

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	1st Cross Road (Left)	Sqm	1	37.00	6.10		225.70		
	2nd Main Road	Sqm	1	128.00	6.90		883.20		
	2nd Cross Road (Left)	Sqm	1	66.00	6.00		396.00		
	2nd Cross Road (Right)	Sqm	1	60.00	5.10		306.00		
	3rd Cross Road (Left)	Sqm	1	60.00	5.30		318.00		
	3rd Cross Road (Right)	Sqm	1	64.00	5.30		339.20		
	3rd Cross, 2nd Cross connecting Road (Right)	Sqm	1	43.50	5.00		217.50		
	Basic rate	5.00							
	Area weightage 6%	0.3							
	Sub Total	**5.30**							
	Total						**4253.60**	**5.30**	**22545.00**
11	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6)								
	Road Cut Portion								
	Puttenahalli KHB Colony								
	1st Main Road	Cum	1	14.00	1.00	0.05	0.70		
	1st Cross Road (Left)	Cum	1	12.00	1.50	0.05	0.90		
	2nd Main Road	Cum	1	10.00	2.00	0.05	1.00		
	2nd Cross Road (Left)	Cum	1	9.00	0.50	0.05	0.23		
	2nd Cross Road (Right)	Cum	1	17.00	1.00	0.05	0.85		
	3rd Cross Road (Left)	Cum	1	11.00	1.20	0.05	0.66		
	3rd Cross Road (Right)	Cum	1	7.00	0.60	0.05	0.21		
	3rd Cross, 2nd Cross connecting Road (Right)	Cum	1	12.00	2.00	0.05	1.20		
	Basic rate	8062.00							
	Area weightage 6%	483.72							
	Sub Total	**8545.72**							
	Total						**5.75**	**8545.72**	**49096.00**
12	KSRRB 500-7. Providing and **applying tack coat** using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-161,I No-21.7)								
	Puttenahalli KHB Colony								
	1st Main Road	Sqm	1	224.00	7.00		1568.00		
	1st Cross Road (Left)	Sqm	1	37.00	6.10		225.70		
	2nd Main Road	Sqm	1	128.00	6.90		883.20		
	2nd Cross Road (Left)	Sqm	1	66.00	6.00		396.00		
	2nd Cross Road (Right)	Sqm	1	60.00	5.10		306.00		
	3rd Cross Road (Left)	Sqm	1	60.00	5.30		318.00		
	3rd Cross Road (Right)	Sqm	1	64.00	5.30		339.20		
	3rd Cross, 2nd Cross connecting Road (Right)	Sqm	1	43.50	5.00		217.50		
	Basic rate	12.00							
	Area weightage 6%	0.72							
	Sub Total	**12.72**							
	Total						**4253.60**	**12.72**	**54106.00**
13	KSRRB M500-19. Providing and laying **bituminous concrete** using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 507 of MORTH V revision using40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 45 mm) with 5.4% VG-30 Bitumen(P.No-162,I No-21.22.6)								
	Puttenahalli KHB Colony								
	1st Main Road	Cum	1	224.00	7.00	0.04	62.72		

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	1st Cross Road (Left)	Cum	1	37.00	6.10	0.04	9.03		
	2nd Main Road	Cum	1	128.00	6.90	0.04	35.33		
	2nd Cross Road (Left)	Cum	1	66.00	6.00	0.04	15.84		
	2nd Cross Road (Right)	Cum	1	60.00	5.10	0.04	12.24		
	3rd Cross Road (Left)	Cum	1	60.00	5.30	0.04	12.72		
	3rd Cross Road (Right)	Cum	1	64.00	5.30	0.04	13.57		
	3rd Cross, 2nd Cross connecting Road (Right)	Cum	1	43.50	5.00	0.04	8.70		
	Basic rate	9435.00							
	Area weightage 6%	566.10							
	Sub Total	10001.10							
	Total						170.14	10001.10	1701628.00
14	**KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	Puttenahalli KHB Colony								
	1st Main Road	Sqm	2	224.00	0.10		44.80		
	1st Cross Road (Left)	Sqm	2	37.00	0.10		7.40		
	2nd Main Road	Sqm	2	128.00	0.10		25.60		
	2nd Cross Road (Left)	Sqm	2	66.00	0.10		13.20		
	2nd Cross Road (Right)	Sqm	2	60.00	0.10		12.00		
	3rd Cross Road (Left)	Sqm	2	60.00	0.10		12.00		
	3rd Cross Road (Right)	Sqm	2	64.00	0.10		12.80		
	3rd Cross, 2nd Cross connecting Road (Right)	Sqm	2	43.50	0.10		8.70		
	Basic rate	429.00							
	Area weightage 6%	25.74							
	Sub Total	454.74							
	Total						136.50	454.74	62073.00
								Grand Total	2853690.92
								GST Charges (12% of estimated cost)	342442.91
								Miscellenious and rounding	3866.00
								Total Amount	3200000.00
								RUPEES THIRTY TWO LAKHS ONLY	

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2018-2019,Issue rates and Data Rates.

Assistant Engineer
BBMP

Assistant Executive Engineer
BBMP

Executive Engineer
BBMP

Administrative Approval
Accorded For ..32.00 lakhs.
Head of A/C...3726
CER NO :...62..... Dt: 13/12/2021

TA

AE (YNK)

Technical Sanction
Accorded For ..32.00 lakhs.
Head of A/C...3726
CER NO :...62..... Dt:13/12/2021

TA